Interdepartmental Memorandum CITY OF SAINT PAUL





TO: Merritt Clapp-Smith, Senior Planner, PED

FROM: Greg Reese, Parks & Recreation, Forestry

DATE: February 8, 2010

SUBJ: Draft Off-Street Parking Code Amendments

Thank you for sending me the off-street parking code amendments draft, Merritt. I have perused the document and submit the following comments for your consideration.

- Sec. 63.310. Entrances and exits. A minimum 5-foot clear zone between existing boulevard trees and any entrance and exit from a parking facility must be maintained.
- **Sec. 63.311. Wheel stops.** It's not clear to me how a "curb, wheel stop or other protective barrier" operationally function in ways to guarantee a maximum two (2) landscaped (sic) vehicle overhang.
- Sec. 63.313 Visual Screening. When screening is created using flora, what is the code enforcement mechanism? In my experience, enforcement appears to be somewhat erratic.

• Sec 63.314. Landscaping

(a.) Perimeter landscape. If trees are proposed for a "landscape yard," it is imperative the *yard* provides enough usable soil volume to allow for root growth to support a vital and vigorous tree. A general rule is that for each inch of dbh (trunk diameter 4½ above grade), 20 - 25 sq. ft of <u>uncompacted</u> soil is required. For a 25-inch elm, this converts to about 900 – 1200 cu. ft. of uncompacted soil. A **4-foot wide landscape yard seems to be inadequate.** Also, three (3) additional feet for vehicle overhang will work much of the time, but as experience shows, not all of the time. Of course, this assumes Sec. 63.311 Wheel stops, is deficient. It only takes one rear truck bumper to destroy a young and vulnerable tree. Also, low branches on young trees a vulnerable when overhang space is inadequate. Research supporting *usable soil volume recommendations* includes:

Lindsey, P. and N.L Bassuk. 1992 Redesigning the urban forest from the ground below: A new approach to specifying adequate soil volumes for street trees. Journal of Arboriculture 24 (3): 25-39.

Urban, J 1992. Bringing order to the technical dysfunction with the urban forest. Journal of Arboriculture 18 (2):85-90.

USDA Forest Service Ag. Handbook 355

- (b) Screening landscaping. When screening landscaping is contiguous with the public right of way, stipulations contained in Chapter 105, Care and Maintenance of Boulevard, in the legislative code should be operative, e.g., Sec. 105.04 (1) / sight planes, (2) / r.o.w. encroachment.
- (d) Tree Plantings. Do trees need to be planted at "regular interval" or would a "recognizable pattern" be sufficient. Also, the usable soil volume recommendation in (2) should be operative for trees planted both in landscape areas and / or tree wells.

• Sec. 63.317. Parking Structures.

- (d) A minimum five (5) foot clear zone between an existing boulevard tree and entrance drives to structured parking should be required.
- Sec. 63.318. Lighting. In areas where trees are planted, the tree canopy will affect surface lighting and lighting infrastructure needs to be adjusted accordingly. For instance, street trees interfere with bent straw lighting but the city's current standard ornamental light fixture (circa 14 feet tall) is more harmonious with trees.

• Sec. 63.319 Stormwater runoff.

- (b) 1. Flora must be compatible with *stormwater collection area* ecosystem, e.g. salt tolerant trees.
- **Section 60.213.L.** Graded areas that direct runoff flows to recessed landscape areas properly constructed will work for perpetuity. But, what are the code requirements to insure flora in the *stormwater landscaping areas* is sustainable?
- Sec. 63.115 (a). What are the code requirements vis a vis landscaping and plant materials?

The big landscaping issues all relate to sustainability, Merritt. First and foremost for trees is enough space for tree roots to grow and support mature trees, Then, with appropriate plant selection and protection from mechanical injuries, we can reasonably expect off-street parking areas will be green and aesthetically pleasing, not only in year one of their life, but also as they emerge from "puberty into adulthood." Give me a shout if I can be of further service in these matters.

C: Cy Kosel Jody Martinez